

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 2, 12-16 and 18 in accordance with the following:

1. (currently amended) A method of providing sub-code data to a host computer in an optical disc drive formed so that data from a pick-up is reproduced through a buffer, comprising:

setting the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data whenever the data of a the predetermined unit is output from the buffer; and

transmitting the set sub-code data to the host computer when the sub-code data is requested from the host computer in a state where the pick-up is set to be in the temporary pause mode during the a reproduction mode.

2. (currently amended) The method of claim 1, wherein the sub-code data is set to include track information, a relative address, and an absolute address, ~~which are determined using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of the predetermined unit data.~~

3. (original) The method of claim 1, wherein the setting of the sub-code data comprises setting the sub-code data whenever the data of one sector unit is output from the buffer.

4. (original) The method of claim 2, wherein said relative address contains information of reproduction time of a corresponding melody from a plurality of melodies recorded on the disc.

5. (original) The method of claim 4, wherein the setting the sub-code data comprises increasing the relative address and the absolute address whenever the data of one sector is output from the buffer.

6. (original) The method of claim 5, further comprising resetting the relative address when the data of one sector output from the buffer is the last sector of the corresponding melody.

7. (original) The method of claim 6, further comprising determining the last sector of the corresponding melody based on information provided in the table of contents.

8. (original) The method of claim 2, wherein the absolute address contains information of reproduction time of an entire portion of the disc.

9. (original) The method of claim 4, wherein the absolute address contains information of reproduction time of an entire portion of the disc.

10. (currently amended) The method of claim 1, further comprising:
continuously checking whether the buffer is full during the reproduction mode;
setting the optical disc drive to at the temporary pause mode and moving the pick-up to a temporary pause region of the disc in response to the buffer being full;
wherein the transmitting of the set sub-code data comprises transmitting the set sub-code data to the host computer when the sub-code data is requested from the host computer during the temporary pause mode.

11. (original) The method of claim 1, wherein:
the setting of the sub-code data comprises setting the sub-code data using a microcomputer through a decoder which accesses the buffer; and
the transmitting of the set sub-code data comprises transmitting the set sub-code data from the microcomputer through the decoder to the host computer.

12. (currently amended) A method of providing sub-code data stored on a disc to a host computer in an optical disc drive formed so that data from the disc and read using a pick-up is reproduced through a buffer, the method comprising:

storing the data and the sub-code data read from the disc in the buffer during a reproduction mode;

reading the data from the buffer in predetermined units to the host computer;

setting a current item of the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data in response to one of the predetermined units of the data being read from the buffer while checking whether the buffer is full; and

transmitting the current item of the set sub-code data to the host computer in response to the buffer being full and a request from the host computer for the sub-code data in a state where the pick-up is set to be in the temporary pause mode during the reproduction mode.

13. (currently amended) A method of providing sub-code data stored on a disc to a host computer in an optical disc drive formed so that data from the disc and read using a pick-up is reproduced through a buffer, the method comprising:

storing the data and the sub-code data read from the disc in the buffer during a reproduction mode;

reading the data from the buffer in predetermined units to the host computer;

setting a current item of the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data in response to one of the predetermined units of the data being read from the buffer; and

transmitting the current item of the set sub-code data to the host computer in response to a request from the host computer for the sub-code data in a state where the pick-up is set to be in the temporary pause mode during the reproduction mode.

14. (currently amended) A method of providing sub-code data to a host computer in an optical disc drive, the method comprising:

reading data and sub-code data from an optical disc;

inputting the data in a buffer;

outputting the data from the buffer;

setting the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data in response to the data being output from the buffer; and

transmitting the set sub-code data to the host computer when the sub-code data is requested by the host computer during a reproduction mode in a state where the pick-up is set to be in the temporary pause mode during the reproduction mode.

15. (currently amended) A method of providing sub-code data to a host computer in an optical disc drive, the method comprising:

reading audio data and sub-code data from an optical disc;

reproducing the audio data through a buffer;

setting the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data in response to the audio data being output from the buffer; and

transmitting the set sub-code data to the host computer when the sub-code data is requested by the host computer in a state where the pick-up is set to be in the temporary pause mode during a reproduction mode.

16. (currently amended) A method of providing virtual sub-code data to a host computer in an optical disc drive formed so that data from a pick-up is reproduced through a buffer, the method comprising:

setting the virtual sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data whenever the data of a predetermined unit is output from the buffer; and

transmitting the set virtual sub-code data to the host computer when the virtual sub-code data is requested from the host computer in a state where the pick-up is set to be in the temporary pause mode during thea reproduction mode.

17. (cancelled)

18. (currently amended) A method of providing sub-code data of an optical disc

drive so that data from a pick-up is reproduced through a buffer, comprising:

setting the sub-code data using a table of contents (TOC) information of a disc installed in the optical disc drive and a number of outputs of predetermined unit data whenever the data of one sector unit is output from the buffer; and

transmitting the set sub-code data to a host computer when the sub-code data is requested from the host computer in a state where the pick-up is set to be in the temporary pause mode during ~~the~~ reproduction mode.